

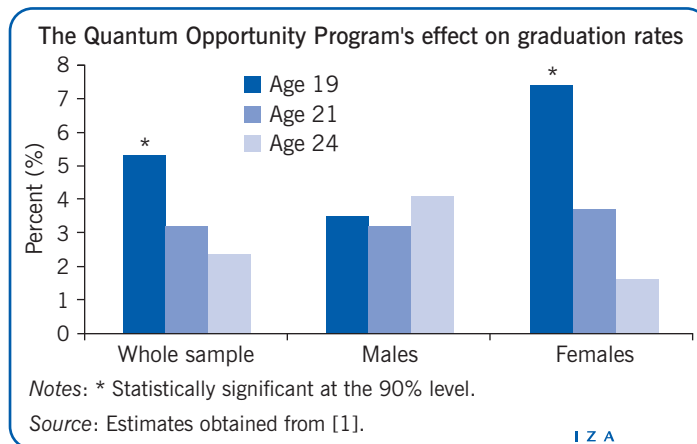
Do youth mentoring programs change the perspectives and improve the life opportunities of at-risk youth?

While most effects are positive, they tend to be modest and fade over time—in addition, some mentoring programs can backfire

Keywords: at-risk youth, noncognitive skills, social barriers, resilience

ELEVATOR PITCH

Mentoring programs such as Big Brothers Big Sisters of America have been providing positive role models and building social skills for more than a century. However, most formal mentoring programs are relatively novel and researchers have only recently begun to rigorously evaluate their impact on changing at-risk youth’s perspectives and providing opportunities for them to achieve better life outcomes. While a variety of mentoring and counseling programs have emerged around the world in recent years, knowledge of their effectiveness remains incomplete.



KEY FINDINGS

Pros

- + Rigorous studies of the effectiveness of mentoring programs find positive but modest effects on some mentees.
- + By providing positive role models, mentors promote resiliency among at-risk youth.
- + Mentors help to build mentees’ (frequently weak) social skills.
- + Community-based after-school programs can provide safe havens where youth can express themselves and receive guidance in engaging in social and community activities.
- + Activities to improve youth’s social and emotional skills are most effective among younger children and at-risk youth.

Cons

- Mentoring programs tend to be better at improving youth’s noncognitive and social skills than their academic performance.
- Positive effects are small and tend to dissipate quickly.
- Mentors may overprotect youth, reducing their costs of engaging in criminal activity and other risky behaviors, and weaken the ties between youth and their parents, breaking important social bonds.
- Mentoring programs may increase enrollees’ awareness of their disadvantages, which can lead to disappointment and risky behaviors.
- Grouping high-risk youth can expose them to negative peer influences, which is associated with increased substance abuse, delinquency, and violence (“deviancy training”).

AUTHOR’S MAIN MESSAGE

Rigorous analyses of mentoring programs find positive but modest effects, with the most disadvantaged or at-risk youth benefiting most. The evidence indicates that mentoring programs tend to be better at improving youth’s non-cognitive and social skills than their academic performance. There is also evidence that benefits dissipate quickly over time, and that programs can backfire, especially in the long term.

MOTIVATION

Young people tend to be among the big losers of many economic and financial crises, with their rates of unemployment frequently double those of the adult population in many developed and developing countries. In addition, the share of those being neither in employment nor in education or training (NEET rate) is relatively large, with an incidence close to 30%, with lower and upper bounds between 5% and 50%. Beyond the scarring effects of joblessness on future earnings, job satisfaction, health, and family formation, other severe consequences of joblessness are poverty, violence, and social instability. Clearly, understanding what mechanisms can improve youth's opportunities is a top priority on many government agendas.

Mentoring and counseling programs are one type of intervention that aims to help youth achieve better outcomes. Mentors seek to assess the unmet needs of at-risk youth and the barriers they face and then facilitate access to a service mix that can address both needs and barriers.

DISCUSSION OF PROS AND CONS

While informal mentoring is likely as old as humanity, formal mentoring programs are relatively recent. “Nearly half of the current mentoring programs were established in the past five years, and only 18% have been operating for more than 15 years” [2]. Most are school- or community-based. In the typical model, an experienced person (the mentor) assists a disadvantaged, at-risk young person (the mentee) in developing the skills and knowledge to enhance professional and personal growth. This relationship can be one-to-one or group mentoring, in which one mentor is assigned a group of mentees. Many mentoring programs seek to build strong positive relationships between (mostly) at-risk youth and mentors. They aim to help mentees develop self-esteem, motivation, tenacity, trustworthiness, perseverance and resiliency, among other noncognitive skills, and to reduce personal, familial, and social barriers that prevent young people from valuing school and succeeding academically [3]. Mentors may also help mentees build social and cultural skills—such as study habits, style of speech, dress, physical appearance—to guide them through secondary school and the transition to college.

Because rigorous evidence in MICs (middle income countries) and LICs (low income countries) is scarce, we will condense existing knowledge on recent rigorous evidence on mentoring programs mainly (but not exclusively) from high-income countries to inform the debate in MICs and LICs. Moreover, as most counseling and mentoring programs tend to operate while young people are still in school and aim at improving under-privileged children and adolescents' educational outcomes, many of the outcomes are not *per se* employment outcomes (but are instead educational outcomes such as attending school, improving grades, reducing crime and engagement in risky behaviors, and graduating from high school).

An overview of evaluation findings

Mentoring programs vary considerably in length, intensity, structure, training of mentors, and the composition of their mentee population, so it is not surprising

that their effectiveness also varies widely. Rigorous studies of the effectiveness of mentoring programs find positive yet modest effects for some mentees [4], [5], [6], [7]. Mentoring programs tend to be better at improving youth's noncognitive and social skills than their academic performance. The experimental Study of Mentoring in the Learning Environment (SMILE) found small, positive effects of mentoring on students' connectedness to peers, as well as their self-esteem and social skills, but no effect on academic outcomes. Another study of community-based after-school programs found that they provide safe havens where young people feel comfortable expressing themselves, gain relief from the pressures of the streets, and receive guidance in how to engage in social and community activities. Other studies have found that mentoring programs reduce truancy and misbehavior and increase school attendance [8].

Two independent random-assignment evaluations of one of the most well-known mentoring programs in the US, Big Brothers Big Sisters of America, found that it reduced substance abuse and violence and improved parent and peer relationships and school attendance and performance [8], [9]. However, the positive effects were small and dissipated within a year. In addition, this is an exceptionally well-structured program that provides thorough training and continuous support to its mentors and has a high degree of quality control. "[T]his level of training and support is not available in many of the mentoring programs that have emerged in recent years. In fact, a survey of more than 700 mentoring programs found that 36% of volunteers received less than two hours of training and 22% received none at all. Similarly, 20% of volunteers *almost never* talk to staff people in their programs and 9% have no contact with staff at all" [2].

Youth mentoring program: Big Brothers Big Sisters of America

Big Brothers Big Sisters is the largest volunteer-supported mentoring network in America. It pairs children to volunteer mentors by partnering up with parents, guardians, schools and corporations, and then it supports these pairings throughout their course. Children facing adversity (often single-parent or low-income families or those with one parent in the military or in prison) join the program and, with the support of their one-to-one mentor, aim to achieve outcomes that can be measured, including greater confidence, better relationships, avoidance of risky behaviors, higher aspirations and success in their education.

Two independent random-assignment evaluations of this renowned program found that it reduced substance abuse and violence, and improved parent and peer relationships, and school attendance and performance (Grossman and Tierney, 1998; Herrera *et al.*, 2007).

Grossman, J. B., and J. P. Tierney. "Does mentoring work? An impact study of the Big Brothers Big Sisters program." *Evaluation Review* 22:3 (1998): 402-425.

Herrera, C., J. B. Grossman, T. J. Kauh, A. F. Feldman, and J. McMaken (with L. Z. Jucovy). *Making a Difference in Schools: The Big Brothers Big Sisters School-based Mentoring Impact Study*. Philadelphia, PA: Public/Private Ventures, 2007.

An important challenge in this literature is to understand the mechanisms through which mentoring works and affects academic outcomes. Evidence from Big Brothers Big Sisters of America suggest that the effects of mentoring on youth's academic outcomes are mediated through improved parental relationships. Improved perceptions of parental relationships, although not the sole determinant, are important mediators of change in adolescents' academic outcomes and behaviors. These results are consistent with other findings on the relevance of parents' involvement in early childhood interventions.

Other evaluations have found that the positive results fade within a few months of program participation. An experimental study of the Across Ages mentoring program found that the encouraging outcomes (such as less substance abuse and fewer problem behaviors, as well as stronger attachments to school and family) were not sustained beyond the end of the school year.

Youth mentoring program: Across Ages

Across Ages is a mentoring program for youths aged 9–13 years with the goal of preventing, reducing or delaying the use of alcohol, tobacco and other drugs. The unique feature of this program is that the youths are paired with older adult mentors aged 55+. Youths on this program include those who are economically disadvantaged, school failures, those with few positive adult role models or with peer groups who engage in risky behaviors. Mentors help to increase knowledge of substance abuse, improve school bonding, strengthen relationships and enhance problem-solving and decision-making skills.

An experimental study of the Across Ages mentoring program found that the encouraging outcomes (such as less substance abuse and fewer problem behaviors, as well as stronger attachments to school and family) were not sustained beyond the end of the school year.

Aseltine, R. H., M. Dupre, and P. Lamlein. "Mentoring as a drug prevention strategy: An evaluation of across ages." *Adolescent and Family Health* 1 (2000): 11–20.

Other studies of mentoring programs have found neutral effects. An experimental-design study of 32 US school mentoring programs for at-risk students in grades 4–8 whose objective was to improve student academic and behavioral outcomes through the guidance and encouragement of a volunteer mentor, found no statistically significant effects over one school year after accounting for multiple comparisons within the three domains examined: academic achievement and engagement, interpersonal relationships and personal responsibility, and high-risk or delinquent behavior [10]. The programs were part of the US Department of Education's Student Mentoring Program.

Similarly, a different type of intervention that also aimed at improving non-cognitive skills has also found discouraging results. Although in this case, the authors present convincing evidence that unobservables may be biasing these results. Using a quasi-experimental design, the study evaluates the effects of a two-year intervention that targeted 14-year-old at-risk youth's non-cognitive skills—such as self-confidence, locus

of control, self-esteem and motivation—with the aim of improving students' records of attendance, test scores, and end-of-compulsory-education (age 16) cognitive outcomes. The cross-sectional quasi-experimental estimates of the effect of the policy show a negative and significant impact on treated young people's test scores at age 16, however, difference-in-differences and double-differences estimates suggest that negative selection into the program based on youth's unobservables may be biasing these results.

Of greater concern, several studies have found detrimental effects of mentoring programs, especially in the long term. A randomized social experiment examined the Quantum Opportunity Program, which offers low-performing high school students in low-performing US schools mentoring, educational services, and financial rewards during high school (and for one additional year for students who fall behind one grade). The study found that the short-term educational successes were modest and that the program's effects on risky behavior were detrimental in the long term, with male participants more likely to commit crimes and be arrested in their mid-20s than students who had not been in the program [1].

Youth mentoring program: Quantum Opportunity Program

The Quantum Opportunity Program is a comprehensive, intensive program for youths of high-school age in the US. It offers mentoring, tutoring, case management and other education assistance and support in order to encourage those participating to complete high school, join a college and avoid risky behaviors. Youths can join in the ninth grade and receive support for four to five years, even if they move from the district or leave school. They are offered financial incentives for taking part; participants are paid for every hour devoted to core program activities with some money paid immediately and the rest put into a savings account for when they complete high school.

A thorough evaluation of the program finds that the short-term educational successes of the Quantum Opportunity Program were modest and that the program's effects on risky behavior were detrimental in the long term, with male participants more likely to commit crimes and be arrested in their mid-20s than students who had not been in the program (Rodríguez-Planas, 2012).

Rodríguez-Planas, N. "Longer-term impacts of mentoring, educational services, and learning incentives: Evidence from a randomized trial in the US." *American Economic Journal: Applied Economics* 4:4 (2012): 129–139.

Based on psychologists and economists' evidence of a strong link between substance abuse and school performance, a recent study explores whether the Quantum Opportunity Program worked best for those youth most (or least) at risk of engaging in risky behaviors. The author finds that the effectiveness of this five-year group mentoring program varied across groups, with the program benefiting ex-ante high-risk students and being detrimental to ex-ante low-risk students. The mentors were social workers trained to identify and deal with the many structural barriers facing youth. As such, they identified the youth at high risk and succeeded in curbing their risky behaviors during high school. By doing so, they improved high school graduation rates and post-secondary education enrollment at age 19, 21, and 24. In contrast, the

program was unsuccessful among youth in the bottom half of the predicted drug-use distribution, given that it increased their engagement in risky behaviors (especially while in high school) and had no positive effects on educational outcomes in the short-, medium-, or long-term. The evidence presented is suggestive that negative peer effects might explain the lack of beneficial effects for this group (see following section).

A randomized experimental trial of the Cambridge-Somerville Youth Study, a community-based treatment program that sought to prevent delinquency, also found detrimental effects. Under the program, boys aged 5–13 and their families were visited twice a month for five years by a counselor, and the boys received services in a variety of areas, including tutoring, medical and psychiatric care, summer camps, Boy Scouts, YMCA, and other community programs. By contrast, children in the control group did not receive any referrals or visits from a counselor. The evaluation found that youth who had been in the program were more likely to be arrested and to have negative physical and psychological health impacts over the long term than were youth in the control group. The impacts were measured up to 30 years later, using official state records.

Why might mentoring programs backfire?

A study of the unanticipated negative effects of mentoring and counseling programs proposed several potential explanations [7]. One of them, the deterrence hypothesis, postulates that overprotection by mentors reduces the costs to mentees of engaging in criminal and other risky behaviors by enabling them to avoid internalizing the full costs of engaging in such behaviors. This view is consistent with Becker's economic model of crime deterrence through punishment and sanctions. Opposing this view is a quasi-experimental study suggesting that youth are not responsive to sanctions.

Another explanation is that mentors may displace parents and other family members in a mentee's life, thus breaking important social bonds and weakening a source of informal mentoring. An alternative and related explanation is that because mentees' parents trust that another adult (the mentor) is also watching over their children, they end up investing less time with their children and paying less attention to possible warning signs than the parents of youth in the control group. In essence, the program may have led to a substitution effect away from the parents' attention, which could explain these detrimental findings.

Some researchers contend that mentoring programs may make mentees more aware of their relative disadvantage, causing feelings of disappointment, inadequacy, or envy that lead them into risky behaviors.

“Deviancy training” is another proposed explanation for unexpected negative effects of mentoring programs. Mentees' peers may reinforce deviant conduct by responding with approval and attention, especially in programs that assign mentors to work with several mentees at the same time. Research has found that increased exposure to negative peer influences via deviancy training is associated with increased substance use, delinquency, and violence. Furthermore, interventions serving high-risk students may generate a greater deviancy training effect as the population is more likely to actively model and encourage deviance. Indeed, research suggests that grouping high-risk youth together for intervention services can increase subsequent delinquency.

A recent study of the Quantum Opportunity Program, a group mentoring program, finds that the low-risk students provided positive peer effects to the high-risk students, and vice-versa. Under this interpretation, group mentoring might not be effective if only targeted at high-risk students. Instead, it would be effective if implemented *only* for low-risk students, if *no* high-risk students were involved as evidence suggests that the program was detrimental for youth in the bottom half of the risk distribution through their interaction with the ex-ante-high-risk peers. Should there have been no high-risk students in the program, the low-risk students would not have performed badly. Conversely, the program might not benefit high-risk students if low-risk students are not involved.

A final possibility is that unintentional negative effects of mentoring emerge, particularly in cases where mentoring relationships are disrupted or terminated. A rigorous experimental evaluation finds negative effects of school-based mentoring on cooperation of high school-aged boys that is consistent with this possibility.

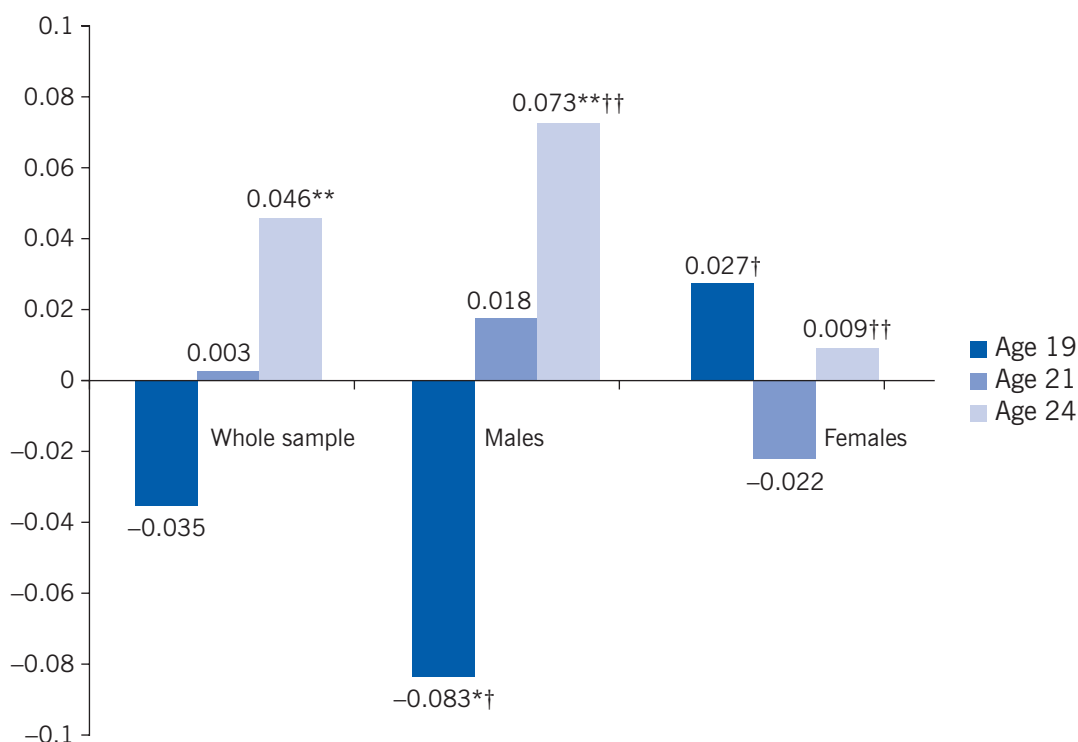
Differential effects by gender

Mentoring programs, just as other youth interventions aiming at improving their educational outcomes, tend to work better for females than for males. Possible explanations for this differential impact include the fact that young women may have more self-discipline, be more likely to delay gratification or have lower discount rates than young men. As the illustration on page 1 shows, the Quantum Opportunity Program improved outcomes to a greater extent for the female mentees than the male ones. Note that this is consistent with the fact that males are more likely to engage in risky behaviors and thus have more high-risk peers than females, especially during high school. The illustration shows that the program was only effective at improving the high school graduation rate in the short term for the whole group, and that this effect was mainly driven by females' higher graduation rate. It is also interesting to note that this positive effect dies off soon after the end of the program.

Figure 1 shows the effects of the program on being arrested. While we observe that the program reduced arrest rates among males when they were in their late-teens, this effect fades away two years later. Perhaps more concerning, Figure 1 shows that by the time youth were in their mid-20s, males who had participated in the program were 7 percentage points more likely to have been arrested than those in the control group. This effect is statistically significantly different from zero and from the effect of the program on females.

Another study to find heterogeneous effects by gender is the experimental evaluation of the Student Mentoring Program, where two important differences across genders are found. While the program improved females' academic performance, it found detrimental effects on males' non-cognitive skills, such as interpersonal relationships, personal responsibility, and community involvement. Both of these estimates were statistically significantly different from zero and the authors rejected the hypothesis that male and female estimates were equivalent to each other.

Figure 1. Effect of the Quantum Opportunity Program on arrest rates, by gender (percentage points)



Notes: * Statistically significant at the 90% level. †, †† indicates that the difference of the estimated effects between males and females is significant at the 90% and 95% level.

Source: Estimates obtained from Rodríguez-Planas, N. "Longer-term impacts of mentoring, educational services, and learning incentives: Evidence from a randomized trial in the US." *American Economic Journal: Applied Economics* 4:4 (2012): 129–139 [1].

Best practices and recommendations

Experts agree that the benefits of mentoring programs are greater for the most disadvantaged and at-risk youth and increase with the quality of the mentor-mentee relationship. Studies have emphasized that activities aiming to improve youth's social and emotional skills are most effective among younger children, who are more receptive and malleable, and youth whose individual or environmental circumstances place them most at-risk. However, while it may be effective to intervene with youth considered most at-risk on the basis of environmental characteristics or both individual and environmental characteristics, one study cautions that few benefits have been found in programs that identify youth for intervention based solely on individual characteristics (such as academic failure) since few benefits from mentoring have been identified for such a group.

Another key element in determining effectiveness is program quality. When mentors build strong personal relationships with mentees, the positive effects tend to endure, as the benefits of greater socialization and integration into mainstream society foster further personal and emotional development. Indeed, secondary analyses of both school- and community-based Big Brother Big Sister of America interventions find that outcomes depend on the quality of the mentoring relationships, with greater benefits for mentees in stronger relationships and neutral or even negative outcomes

for mentees with less effective mentoring relationships [8]. Beneficial outcomes are more likely when programs provide adequate support and structure to mentoring relations throughout the formative stages of their development and when programs build strong relationships between mentors and mentees through frequent contact, emotional closeness, and enduring ties [4].

LIMITATIONS AND GAPS

Despite the large body of evaluation literature on mentoring programs, not enough is known about their effectiveness. Most of the evidence comes from the US, and few of the studies examine youth employment outcomes. More evaluation is needed, in particular, of the long-term impacts of mentoring programs in light of the findings of diminishing effects over time—and of detrimental effects in some cases. In addition, studies need to take a broader, multi-angle focus on the effects of the program on young people's lives, including employment outcomes, earnings, risky behaviors, and other measures of family life and physical and mental well-being.

SUMMARY AND POLICY ADVICE

Evaluations of mentoring programs find positive but modest effects, especially for females, the most disadvantaged or at-risk youths. The results vary considerably depending on the characteristic of the individuals involved and the quality of the relationships formed between mentors and mentees [6]. As one study noted, “robust research does indicate benefits from mentoring for some young people, in some circumstances, in relation to some outcomes.” However, there are also concerns that the benefits dissipate over time and that, in some cases, these programs may worsen outcomes for some mentees.

Considering the potentially unintended medium- to long-term effects of some of these programs, policymakers, practitioners, and researchers should design programs and evaluations to better identify who benefits most (and least) and why, so that programs can be tailored to the problems and needs of particular youths. Studies and data collection need to focus on a broad spectrum of life outcomes (including noncognitive skills) over a long period of time. Only with that kind of information it will be possible to disentangle outcomes and answer the following questions: Do the short-term changes generated by mentoring programs persist, or do they fade over time? Do they translate into longer-term payoffs, as measured by different life achievements?

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Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

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